BRUHAT BANGALORE MAHANAGARA PALIKE

BILL OF QUANTITIES (BOQ)

NAME OF THE WORK:- Improvements to drains in chikka siddappa Layout AND ESTABLISHMENT OF RO PLANT AND PROVIDING AND FIXING OPEN Gym and childrens play eyuipments in Amruthalli in ward no.07, Byatarayanapura Kodigehalli Sub Division.

Sl. No.	Approved Qty.	Description	Unit	Issued to Technical Manager , KRIDL	
				In Figures	In Words
1	331.43	KSRRB 300-1. Earthwork excavation by manual means in rodinary soil involving an average horizontal throw upto 2 m and an average lift upto 1.5m, excavated surafce levelled and sides neatly dressed, the disposed earth to be levelled neatly after breaking clods complete as per specifications.. Pg No.141.Item No.19.1)	cum	86.92	Rupees Eighty Six and Ninety Two Paise Only
2	120.44	KSRRB 2-1.1: Earthwork in surface excvation in ordinary soil for levelling and lowerng the ground manually (other than foundation of buildings, culverts road drains and trenches of pipe lines and cables) and removing the excavated stuff to a distance not exeeding 50m and lift upto 1.5m. excavated stuff to a distance not exceeding 50m and lift upto 1.5m excavated syrface levelled and neatly dressed, disposed earth to be levelled after breaking of clods and neatly dressed as per specifications.(Pg No.5.Item No.2.1)	cum	166.42	Rupees One Hundred Sixty Six and Forty Two Paise Only
3	20.00	Providing and constructing load bearing wall with solid concrete solid blocks having block density not less than 18000 Kg/m3 having a minimum average compressive strength of 5.00 N/mm2 confimring to IS 2185 (pART 1):2005 and constructed with CM 1:4 as per IS 2572:2005 including cost of all materialsincluding cost of all materilas, labour charges, scaffolding, curing complete as per specifications. with solid concrete blocks 400x200x200mm (PWDSR 2015-16, I. 5.27.1, P. 25.1)	cum	993.22	Rupees Nine Hundred Ninety Three and Twenty Two Paise Only
4	97.50	Providing granite slabs of selected quality roughly dressed and fixed in cementer mortar (1:6) including fixing curing etc., complete. Pg No.25, Item No.5.31.1 (7.5 cms thick)	sqm	665.68	Rupees Six Hundred Sixty Five and Sixty Eight Paise Only
5	31.62	KSRB 4-1.3: Providing and laying in position plain cement concrete of nominal mix 1:4:8 using 40mm and down size graded granite metal machine mixed, conrete laid in layers not exceeding 15 cms. Thick well compacted in foundation and plinth, including cost of all materials labour, HOM of machinery, curing complete as per specification . (Pg.No.12, It.4.3)	cum	5159.02	Rupees Five Thousand One Hundred Fifty Nine and Two Paise Only
6	21.00	Cement concrete pavement. Construction of un-reinfirced plain cement concrete pavement, thickness as per deisgn, over a prepraed sub base with OPC cement or any other type as per clause 1051.2.2 with 25mm and down size graded granite metal coarse aggregates and fine aggregates ,with superplastiser @ 3lts confirming to IS9103-1999 REAFFIRMED-2008, Mixed in a concrete mixer of not less than 0.6 cum capacity and approximate weigh batcher as per approved mix design, laid in approved fixed side form work (steel channel, laying and fixing of 125 micron thick polythene film, wedges, steel plates inlcuding levelling the form work as per drawing) and spreading the concrete with shovels, rackers compacted using needle, screed and plate vibrator and finished in a continous operation including, provision of contraction, expansion, construction operation including longitudinal joints, including groove cutting charges joint filler, sparation menebrane, sealant, admixtures as approved, curing compound, finishing to lines and grades as per drawing complete as per specfication.M20 (AT 300 Kg per cum coarse aggregats @ 0.69cum and fine aggregate @0.43cum) (Pg No.177, It No.22.6.2)	cum	5508.82	Rupees Five Thousand Five Hundred Eight and Eighty Two Paise Only
7	0.12	KSRB 4-1.6: Providing and laying in position plain cement concrete of mix 1:2:4 with cement @ 240 kgs with 20mm and down size graded granite metal coarse aggregates @ 0.878 cum and fine aggregates @ 0.53cum, machine mixed concrete laid in layers not exceeding 15cms thick well compacted in foundation plinth and cills including cost of all materials, labour HOM of machinery curing complete as per specifications.(Item No.4.6, Page No.12)	cum	5767.46	Rupees Five Thousand Seven Hundred Sixty Seven and Forty Six Paise Only
8		Providing and fixing open gym euipments and children play equipments in Amruthalli.,	Nos		

EXECUTIVE ENGINEER-4
KRIDL, BBMP DIVISION
BENGALURU-560 010

Signature of the contractor

2/03
Executive Engineer
Byatarayanapura Division
BBMP, Bangalore-92
02/03

Executive Engineer

Sl. No.	Approved Qty.	Description	Unit	Issued to Technical Manager , KRIDL	
				In Figures	In Words
9	1	TMP 013 WONDER PLAY	Nos	2202026	Rupees Two Million Two Hundred Two Thousand Twenty Six Only
10	1	TMP005-Thrill Fun	Nos	1637996	Rupees One Million Six Hundred Thirty Seven Thousand Nine Hundred Ninety Six Only
11	1.00	Chest Press	Nos	214895	Rupees Two Hundred Fourteen Thousand Eight Hundred Ninety Five Only
13	48.00	KSSRB M 400-17: Providing laying, spreading and compacting graded fine aggregate to wet mix macadam specificationns including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed method of tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surfce and compating with vibratory roller to achieve the desired density complete as per specifications. MORTH specifications no. 406(P-157., It No: 20.18)	cum	1768.08	Rupees One Thousand Seven Hundred Sixty Eight and Eight Paise Only
14	1353.60	KSRRB-500-2: Cleaning the existing black topped surface with brooms, soft brushes and finally dusting with old gunny bags and or/ compressed air to receive bituminous treatment including cost of all materails, labour, HOM Machineries complete as per specifications.(Page No.161, Item No.21.2)	sqm	3.18	Rupees Three and Eighteen Paise Only
15	1353.60	KSRRB 500-07: Providing and applying tack coat with80/100 grade bitumen(VG10) on the prepared black topped surfaces at 2.5 kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials , labour HOM Machineries complete as per specifications.. (Pg No. 160. Item No. 21.7)	sqm	11.66	Rupees Eleven and Sixty Six Paise Only
16	40.61	KSRRB 500-18: Providing and laying semi dense bituminous concrete using crushed aggragates of specified grading, premixed with bituminous binder and filler, transporting the hot mix to work to site,laying with a hydrostatic paver with paver finisher to the required grade, level and alignment rolling with smooth wheeled, vibratory and tandem rolleres to achieve the desired compaction as per MORTH Specification clause No. 500.8 complete in all respects as per specifications.-25-30mm compacted thickness with 5% bitumen 80/100 grade (grading II).(P178, It No: 21.20.6)	cum	6433.14	Rupees Six Thousand Four Hundred Thirty Three and Fourteen Paise Only
17	56.40	KSRRB M800-13: Road marking with hot applied thermoplastic compund with reflectrising glass beads on bituminous surface. Providing and laying of hot applied thermoplastic compund 2.5mm thick including reflectorising glass beads at 250gms per sqm area, thickness of 2.5mm is exclusive of surface apllied glass beads as per IRC:35. The finished surface to be level, uniform and free from streaks and holes complete as per specfications. MORTH specifications No.803.(Pg No.185.Item No.24.15)	sqm	542.72	Rupees Five Hundred Forty Two and Seventy Two Paise Only
18	331.43	KSRRB M100-1 Loading and unloading of stone boulder/stone aggregates/ sand/ kanker/ moorum. KSRRB M100-1:Placing tipper at loading point loading with front end loading, dumping turning for return trip, excluding time for haulage and return trip complete as per specification MORTH Chapter 1 (Page 118, item No. 17.1)	cum	106.00	Rupees One Hundred Six Only
19	7.53	KSRB 2-1.1: Earth work in surface excavation in ordinary soil for leveling and lowering the ground manually (other than foundation of buildings, culverts, road drains and trenches of pipe line and cables) and removing the excavated stuff to a distance not exceeding 50m and lift upto 1.5m, excavated surface leveled and neatly dressed, disposed earth to be leveled after breaking of clods and neatly dressed as per specifications, Specification No KBS 2.1(a) / 2.3.1, No. 5 / Item No. 2.1	cum	169.56	Rupees One Hundred Sixty Nine and Fifty Six Paise Only

Executive Engineer
Byatarayanapura Division
BBMP, Bangalore-92

Signature of the contractor

Executive Engineer

Sl. No.	Approved Qty.	Description	Unit	Issued to Technical Manager , KRIDL	
				In Figures	In Words
21	6.03	KSRB 5.2.3 : Providing and constructing granite / trap / basalt size stone masonry in foundation with cement mortar 1:6, stone hammerd dressed in courses not less than 20 cms high, bond stones at two m. apart in each course including cost of materials, labour, curing complete as per specifications.KBS 5.1.13 Page No. 23 / Item No. 5.6 /	cum	4521.96	Rupees Four Thousand Five Hundred Twenty One and Ninety Six Paise Only
22	2.57	KSRB 5.3-3 : Providing and constructing granite / trap / basalt size stone masonry in basement with cement mortar 1:6, edges of stones chistle dressed in courses not less than 15 cms high, bond stones at two m. apart in each course including cost of materials, labour, curing complete as per specifications.KBS 5-1.13 Page No. 23 / Item No. 5.9 /	cum	5405.40	Rupees Five Thousand Four Hundred Five and Forty Paise Only
23	7.53	KSRB 2.3 : Filling available excavated earth (excluding rock) in sides of foundations upto plinth in layers not exceeding 20 cms. in depth, compacting each deposited layer by ramming after watering with lead upto 50 m. and lift upto 1.5 m. including cost of all labour complete as per specifications. Specification No. KBS 2.9 Page No. 6 / Item No. 2.10	sqm	137.16	Rupees One Hundred Thirty Seven and Sixteen Paise Only
24	1.38	KSRB 4-1.6 : Providing and laying in position plain cement concrete of mix 1:2:4 with cement @ 240 kgs with 20mm and down size graded granite metal coarse aggregates @ 0.878 cum and fine aggregates @ 0.459 cum, machine mixed, concrete laid in layers not exceeding 15cms, thick, well compacted, in foundation, plinth and cills, including cost of all materials, labour, HOM of machinery, curing complete as per specifications, specification. No. KBS 4.1,4.2. No. 12/ Item No. 4.6	cum	5876.28	Rupees Five Thousand Eight Hundred Seventy Six and Twenty Eight Paise Only
25	16.64	Providing flooring with 60 cms.x 60 cms. size Vitrified glazed tiles of approved quality & make, fixed on top of existing flooring fixed with suitable adhesive, including cutting the tiles to the required size and fixing etc., complete Page No. 107, Item No. 14.44,	Nos	1154.52	Rupees One Thousand One Hundred Fifty Four and Fifty Two Paise Only
26	130.00	Providing and fixing Pre cast solid concrete kerb stones made out of CC 1:2:4 of size 450x200x400 mm and finished with CM 1:3 plastering and finishing cutting etc., complete. Page No. 25 / Item No. 5.29.1)	Nos	385.84	Rupees Three Hundred Eighty Five and Eighty Four Paise Only
27	58.50	Providing and applying ready mix priming coat over oncrete / masonry, / asbestos cement sheet / plastered surfaces includding preparing the surface after thorougly cleaning of oil, grease, dirt and other foreign matter and sand papering including cost of materials, labour compelte as per specifications. Page No. 122 / Item No. 15.80)	sqm	27.56	Rupees Twenty Seven and Fifty Six Paise Only
28	58.50	Providing and applying spray painting in two coats (excluding priming coat) over oncrete / masonry, / asbestos cement sheet / plastered surfaces includding preparing the surface after thorougly cleaning of oil, grease, dirt and other foreign matter and sand papering including cost of materials, labour compelte as per specifications. Page No. 121 / Item No. 15.81)	sqm	69.96	Rupees Sixty Nine and Ninety Six Paise Only
29	7.50	KSRB 14.6-1: Providing and laying heavy duty cobble stones 60mm thick interlock pavers, using cement and course sand for manufacture of blocks of approved size, shape and colour with a minimum compressive strength of 281 kg per sqm over 50mm thick sand bed (average thickness) and compacting with plate vibrator having 3 tons compaction force thereby forcing part of sand underneath to come up in between joints, final compaction of paver surface joints into its final level, including cost of materials, labour and HOM of machineries complete as per specifications. Specification No. KBS (P.101/I.14.6)	sqm	966.72	Rupees Nine Hundred Sixty Six and Seventy Two Paise Only

2/03
Executive Engineer
Byatarayanapura Division
BBMP, Bangalore-92

2/03

EXECUTIVE ENGINEER-4
KRIDL, BBMP DIVISION
BENGALURU-560 010

Signature of the contractor

Executive Engineer

Sl. No.	Approved Qty.	Description	Unit	Issued to Technical Manager , KRIDL	
				In Figures	In Words
30	1.00	Providing revsrse osmosis suystem to cover 2000 Liters of High TDS water per hour **TECHNICAL SPECIFICATIONS** RAW WATER PUMP Purpose:- To feed the Dual Medial filter at pressure more than 2.00 bars which is min operating pressure for filter? **SAND MEDIA FILTER** Purpose:- To remove the total suspendred solids, dirt, iron and reduce silt density index which can foul the members Purpose : To dose anti scaling chemical to protect the scaling formation on RO Membrane MICRON FILTER Purpose : To remove the fine particles ip to 05 microns and reduce silt density levels to acceptable level. HIGH PRESSURE PUMP Purpose : To feed the reverse Osmosis membrane at pressure more than the osmotic pressure taking into consideration flux rate, flow and recovery **RO membrane housing.** Purpose : To remove the major part of TDS into 98% by Reverse Osmosis Membranes arranged and designed to give adequate flow the Recovery. RO CLEANSING SYSTEM ELECTRICAL PANEL Purpose : A control panel is provided as a safety measure for the pumps & other electrical items. Specifications a) Complete starters, overload relays, b) Voltmeter, Ammeter, MCB's indicating lights, c) Rocker switches for Dozers, d) incomers, Auto-Manual switches. INSTRUMENTATION PH DOSING SYSTEM Purpose to dose sodium Bi-carbonate for enhances product water SS till	Nos	946000	Rupees Nine Hundred Forty Six Thousand Only
31	1.00	Providing and Construction of pup panel cabin MS material vetical 50 x 100 mm thick tube, rafter 50 x 100 mm thick rectangle tube 50 x 50 mm thick tuve purlines, roof panel of 30 mm sandwitch puf panel density : 40 kg and wall panel of 30 mm sandwitch puf pannel density : 40 kgs (polyurethane foam) with noth side G I Colour coated sheet ancillaries like C-channels, angles, sealene etc, door of size 1.8 x 2.0 m an alluminium powder coated window of size 1.00 x 2.00 m 1 No of structural glazing (fixed and sliding One side slope as per elclosed drawing cabin of size etc (Approved Quoated Rate) (10 x 12 Ft)	Nos	250204.80	Rupees Two Hundred Fifty Thousand Two Hundred Four and Eighty Paise Only

1. The work should be executed as per the specification and standard specified by the PWD & Other specifications of the Bangalore Mahanagara Palike and as directed.
2. The work should be carried out as per the directions and instructions of the concerned Engineer
3. The Contractor should maintain the quality of work as per the standard specifications.

2/03
Executive Engineer (Byatarayanapura)
Bruhath Bangalore Mahanagara Palike

I am prepared to take up the above work at the rates quoted by me in the Schedule 'B'. 02/03

CONTRACTOR

EXECUTIVE ENGINEER-4
KRIDL, BBMP DIVISION
BENGALURU-560 010